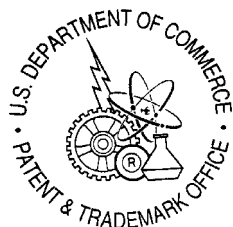


# TAF PROFILE REPORT

## U.S. (FEDERAL) GOVERNMENT PATENTING

1/1977 - 12/1996



April 1997  
U.S. PATENT AND TRADEMARK OFFICE  
OFFICE OF ELECTRONIC INFORMATION PRODUCTS / TAF PROGRAM  
PK3 - Suite 441, WASHINGTON, DC 20231  
tel (703) 306-2600 / FAX (703) 306-2737

*A TECHNOLOGY ASSESSMENT AND FORECAST REPORT*

## TAF Profile Report 1/1977 - 12/1996 Explanation of Data

This Technology Assessment and Forecast (TAF) report profiles patent activity for all U.S. patent documents (design, plant, reissue, and utility patents, defensive publications, and statutory invention registrations) granted between January 1, 1977 and December 31, 1996 for which ownership was assigned to a Federal organization at the time of grant. The source of the data used for this report is the TAF data base maintained by the Office of Electronic Information Products.

### Data Distribution By Date of Grant and By Date of Application

#### **Parts A1 and A2**

Part A1 distributes patent GRANT data by year of patent grant ("Patents Granted By Date of Patent Grant"). Part A2 distributes grant data by the year in which the patented application was filed ("Patents Granted By Date of Patent Application"). Parts A1 and A2 each provide patent counts (pages A1-1 and A2-1) and percent distributions (pages A1-2 and A2-2).

Patent data in the "Pre 1983" column corresponds to the period January 1, 1977 through December 31, 1982.

#### **Part B**

Part B of this report distributes patent GRANT data for organizations that have received U.S. patents since 1977. Data are presented by the year in which the patent was granted ("Patents By Year of Grant") and the year the patented application was filed ("Patents by Year of Application").

DATA FOR THOSE APPLICATIONS WHICH WERE FILED BUT NEVER ISSUED (ROUGHLY 40% OF TOTAL FILINGS) ARE NOT INCLUDED IN THIS REPORT.

Since the average time period between filing for a patent and the issuing of the patent (i.e., a patent's "pendency") is now about 21 months, the patented application data for the most recent years are incomplete.\* This is because a significant number of the applications filed in the most recent years, which will ultimately become patents, were still pending in December 1996. Since they had not yet become patents at the time this report was prepared, they were not included in this report.

Patented application data are of significant value since the date an application was filed more accurately reflects when the technology was developed. Additionally, fluctuations in data based on application date are much more likely to reflect changes in technological activity, since such fluctuations would for the most part be immune from changes in PTO processing such as occurred in 1986 when the PTO issued fewer patents than would

normally have been expected due to a lack of funds to print patents. Note that a patent's "pendency" can be quite variable from one patent to another thereby affecting the date of patent grant. Such variation in pendency is determined by many factors, including PTO workload (which varies between technologies), budget and manpower levels, patent printing schedules, etc.

### Parts of the Report

**Parts A1 and A2** present tables which show, by number and percent, the patent activity. Part A1 presents data by year of patent grant ("Patents Granted by Date of Patent Grant"). Part A2 redistributes grant data by year of patent application ("Patents Granted by Date of Patent Application"). The location of patent origin is determined by the residence of the first-named inventor at the time of grant.

Information on **patent ownership** reflects ownership at the time of patent grant and does not include subsequent changes in ownership. If more than one assignee was declared at the time of grant, the patent is attributed to the first-named assignee. The U.S. and Foreign Corporations ownership categories count predominantly corporate patents; however, patents assigned to other organizations such as small businesses, nonprofit organizations, universities, etc. are also included in this category. While U.S. Government patent ownership includes only patents granted to the Federal Government, no such distinction is made for Foreign Government patents.

**Part B** is a ranked listing of Federal organizations which have received 1 or more U.S. patents since 1977. Information on patent ownership reflects ownership at the time of patent grant (see explanation for Parts A1 and A2, above). Although a substantial effort has been made to combine name variations into a single organizational name, many organizations continue to have patents listed under more than one organizational name.

\* As of December 31, 1996, UTILITY patent application data (most issued patent documents are utility patents) were approximately 93% complete for patent applications filed in 1993, 80% complete for applications filed in 1994, and 30% complete for applications filed in 1995. They are essentially complete for applications filed prior to 1993.

Part A1

Patent Grants as Distributed By Year of Patent Grant

Foreign Individuals	0
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## Part A2

### Patent Grants as Distributed By Year of Patent Application

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[illegible]



## Part B

Ranked Listing of Organizations with Patent Grants  
As Distributed By Year of Patent Grant  
and As Distributed By Year of Patent Application

---- Technology Assessment and Forecast Report ----

U.S. FEDERAL GOVERNMENT (UTILITY, DESIGN, PLANT, REISSUE PATENTS, STATUTORY INVENTION REGISTRATIONS, DEFENSIVE PUBLICATIONS)

Page B - 1

---- Organizational Patenting (Granted: Jan 01, 1977 - Dec 31, 1996) ---- Ranked List of Organizations with 1 or More Patents ----

	Pre 1983	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	TOTAL
UNITED STATES OF AMERICA, NAVY																
Patents By Year of Grant:	2162	318	285	248	233	206	126	145	276	396	314	360	395	347	294	6105
Patents By Year of Application:	3124	242	189	200	118	107	169	210	363	320	348	337	259	115	4	6105
UNITED STATES OF AMERICA, DEPARTMENT OF ENERGY																
Patents By Year of Grant:	1209	131	329	293	258	253	240	233	240	215	250	182	205	119	71	4228
Patents By Year of Application:	1736	259	264	217	223	187	216	247	228	224	173	161	68	25	0	4228
UNITED STATES OF AMERICA, ARMY																
Patents By Year of Grant:	1469	212	187	205	256	254	152	200	170	201	168	184	203	191	155	4207
Patents By Year of Application:	1960	190	197	175	192	144	156	197	171	172	214	202	165	70	2	4207
UNITED STATES OF AMERICA, AIR FORCE																
Patents By Year of Grant:	794	123	181	143	187	204	136	157	114	149	145	139	138	86	104	2800
Patents By Year of Application:	1136	144	162	175	161	130	133	114	154	133	125	108	85	38	2	2800
UNITED STATES OF AMERICA, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION																
Patents By Year of Grant:	503	137	137	144	93	122	93	127	128	151	151	165	160	122	104	2337
Patents By Year of Application:	796	109	100	105	93	96	145	139	136	169	156	163	100	30	0	2337
UNITED STATES OF AMERICA, DEPARTMENT OF AGRICULTURE																
Patents By Year of Grant:	365	47	48	33	34	30	35	43	49	47	55	54	38	49	41	968
Patents By Year of Application:	458	36	31	33	34	39	44	58	57	55	34	42	35	12	0	968
UNITED STATES OF AMERICA, HEALTH & HUMAN SERVICES																
Patents By Year of Grant:	143	35	30	35	28	34	27	34	38	50	76	85	108	97	117	937
Patents By Year of Application:	222	28	35	29	34	37	54	67	75	87	105	85	64	14	1	937
UNITED STATES OF AMERICA, DEPARTMENT OF THE INTERIOR																
Patents By Year of Grant:	237	24	13	14	13	11	10	10	8	18	20	10	10	14	17	429
Patents By Year of Application:	272	13	12	11	11	11	7	12	20	16	9	12	18	5	0	429
UNITED STATES OF AMERICA, DEPARTMENT OF COMMERCE																
Patents By Year of Grant:	38	4	9	6	7	13	10	5	18	8	18	27	34	26	23	246
Patents By Year of Application:	51	3	10	7	10	10	11	16	15	22	41	28	18	4	0	246
UNITED STATES OF AMERICA																
Patents By Year of Grant:	59	4	0	3	13	6	7	8	7	16	18	8	5	14	16	184
Patents By Year of Application:	67	3	1	18	4	4	13	17	17	7	9	12	5	7	0	184
UNITED STATES OF AMERICA, TENNESSEE VALLEY AUTHORITY																
Patents By Year of Grant:	44	3	9	7	13	6	8	6	9	10	5	1	4	8	3	136
Patents By Year of Application:	53	4	9	11	6	10	8	11	6	3	2	8	2	3	0	136

---- Organizational Patenting

(Granted: Jan 01, 1977 - Dec 31, 1996) ---- Ranked List of Organizations with 1 or More Patents ----

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